



File

**NO FURTHER ACTION DECISION DOCUMENT FOR
SS-029, JET ENGINE TEST CELL
PLATTSBURGH AFB, NY
DECLARATION STATEMENT
SEPTEMBER 2000**

SITE NAME AND LOCATION

SS-029, Jet Engine Test Cell
Plattsburgh AFB, NY

PHYSICAL SETTING

Site SS-029 (Jet Engine Test Cell) is a square-shaped site located at the west end of Colorado Street and within the central industrial corridor portion of Plattsburgh AFB adjacent to the eastern edge of the flightline apron [Attachment (Atch.) 1]. The Pavement and Grounds Maintenance Facility (Building 2827) is located north of SS-029. The Fuel Systems Maintenance Dock (Building 2818) is located south of SS-029. The Aerospace Ground Equipment Facility is located in Building 2815, due east of SS-029. This facility and the adjacent Weapons Systems Management and Maintenance Facility (Building 2801) comprise Installation Restoration Program (IRP) Site SS-006.

The prominent site surface features include Building 2820, which houses equipment used to test jet engines; the oil/water separator housing; a partially buried concrete structure near the northeast corner of Building 2820; the cooling water tank adjacent to the east central side of Building 2820; the piping and access structures associated with JP-4 jet fuel UST 2820-1 north of Building 2820; and the paved parking area and access road that surrounds Building 2820.

Although the central industrial corridor area generally slopes gently to the west-southwest, the site occupies a relatively flat area. Soils are highly permeable in the mowed lawn areas surrounding the site; but during heavy precipitation events, surface water flows toward the storm drain catch basin or manhole located near the southeast corner of Building 2820 and storm drain drop inlets in depressions in the lawn areas northwest and southwest of Building 2820.

The Wood Group, an aviation company that utilizes the site for engine testing, is currently leasing the Jet Engine Test Cell.

SITE LOCATION AND DESCRIPTION

The Jet Engine Test Cell was used to test jet aircraft engines by the Air Force from 1969 through 1993. The main structures comprising the facility are Building 2820, an oil/water separator connecting the floor drains inside the building to the sanitary sewer, a 6,000-gallon JP-4 jet fuel underground storage tank, and a large aboveground cooling water storage tank.

Building 2820 is the main structure associated with the SS-029 facility. As a result of the building use, spills of JP-4 jet fuel and lubricating oils occasionally may have occurred. An

oil/water separator is located to the northeast of Building 2820 as shown in Atch. 2. Floor drains within Building 2820 discharge to the oil/water separator. The aqueous discharge from the oil/water separator eventually flows to a sanitary sewer line located along Colorado Street and oil from the separator flows to a separate fiberglass storage tank.

A separator installed in 1971 was reported to have been leaking in May 1989 and was consequently replaced. No soil contamination was reported, and no contaminated soils were removed during the separator replacement.

Several underground storage tanks (USTs) and aboveground storage tanks (ASTs) are/were located at or near the SS-029 site as shown on Attachment 1.1. The tanks reportedly contain(ed) JP-4 jet fuel, unleaded gasoline, No. 2 fuel oil, and diesel fuel to support various fueling and storage facilities at SS-029 and adjacent sites. The ASTs were removed, and there was no evidence of surface contamination reported in association of the tanks. The USTs were removed and replaced in 1992 (with the exception of UST 2820-3). No evidence of contamination was reported during the tank removal/replacement. Therefore, the locations of the current and former USTs and ASTs are not considered areas of concern where the potential for soil and/or ground water exists.

ENVIRONMENTAL INVESTIGATIONS

The Jet Engine Test Cell site was added to the IRP in 1991 when it was included in the Preliminary Assessment (PA) of a number of areas of concern. The assessment was completed in 1992, and no visual evidence of contamination at the site was apparent. However, the PA recommended further investigation of the site's areas of concern, including the collection and analysis of soil and ground water samples.

Chemicals of potential concern at this site are those associated with JP-4 jet fuel spills, such as benzene, toluene, ethylbenzene, xylene, BTEX compounds, and other petroleum hydrocarbons. Areas of concern are the locations of the former oil/water separator and its in-flow/out-flow lines. Potential contamination migrations included soil and ground water.

SI field activities were conducted during October and November 1994. Three soil borings were advanced at the site. Borings were continuously sampled for physical description of the subsurface materials. Soil samples were examined, classified, inspected for signs of contamination, and screened by the supervising field geologist. All observations were recorded and logged. Two of the borings were advanced to the water table in areas immediately downgradient of the oil/water separator and immediately downgradient of the sewer line connecting the building and the oil/water separator. A downgradient monitoring well was installed in the same location as a third boring at a location downgradient from the oil/water separator.

None of the soils encountered exhibited elevated PID readings, visual contamination, or unusual odors. Sample for analysis were therefore collected from zones where potential contaminants might reasonably be expected to remain (just below ground surface (bgs) 0.0 - 2.0 foot depth and just above the water table 4.0 - 6.0 foot depth). All samples were analyzed for

Target Compound List (TCL) volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and RCRA metals. The monitoring well installed during the SI and an existing upgradient monitoring well (MW-02-047) were sampled once on 16 November 1994. Samples were collected using disposable bailers and were analyzed for TCL VOCs, SVOCs and total and dissolved RCRA metals

Of the four VOCs and twelve SVOCs detected in soil borings, none were in excess of "To Be Considered" (TBC) criteria that are legally binding. Of the four metals detected, none were in excess of the NYSDEC TAGM determination of soil cleanup objective and cleanup levels, recommended soil cleanup objectives, or site background levels that were determined in the Background Surface Soil and Ground Water Survey in 1995.

No VOCs or SVOCs were detected in any of the ground water samples taken. Of the four metals detected, total chromium and total selenium exceeded Applicable or Relevant and Appropriate Requirements (ARARs). The ARAR for chromium and selenium is 50 ug/L and 10 ug/L respectively. Detection levels of chromium and selenium were 299 ug/L and 10.1 ug/L respectively. Arsenic was detected below ARARs.

HUMAN HEALTH RISK ASSESSMENT

Human health risk calculations were performed to evaluate the risks associated with human exposure to contaminated media at SS-029 in the absence of remedial measures. Risk posed by exposure to site soils given reasonably expected current and future exposure scenarios were quantified in compliance with appropriate USEPA guidance documents. No unacceptable carcinogenic or non-carcinogenic human health risk is associated with exposure to chemicals detected in soil or ground water.

REGULATORY CONCURRENCE

A Draft Final SI report was provided for regulatory review. The USEPA in correspondence dated 1 July 1997 concurred with the USAF recommendation of No Further Action made in the SI report. The NYSDEC in correspondence dated 11 February 1997, indicated that all of their comments had been adequately addressed, and made no further comments acknowledging that no further action was necessary at site SS-029, Jet Engine Test Cell (Atch. 3)

STATEMENT OF BASIS

This decision is based on the results of the Preliminary Assessment conducted in 1992 and the Draft Final SI Report on the Jet Engine Test Cell (SS-029) dated December 1996. The SI report presented data gathered during SI field activities at the Jet Engine Test Cell during October and November 1994.

DESCRIPTION OF SELECTED REMEDY

Based on the current conditions at IRP site SS-029, it has been determined that no significant risk or threat to the public health and the environment exists. Therefore, no further action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended is required.

DECLARATION

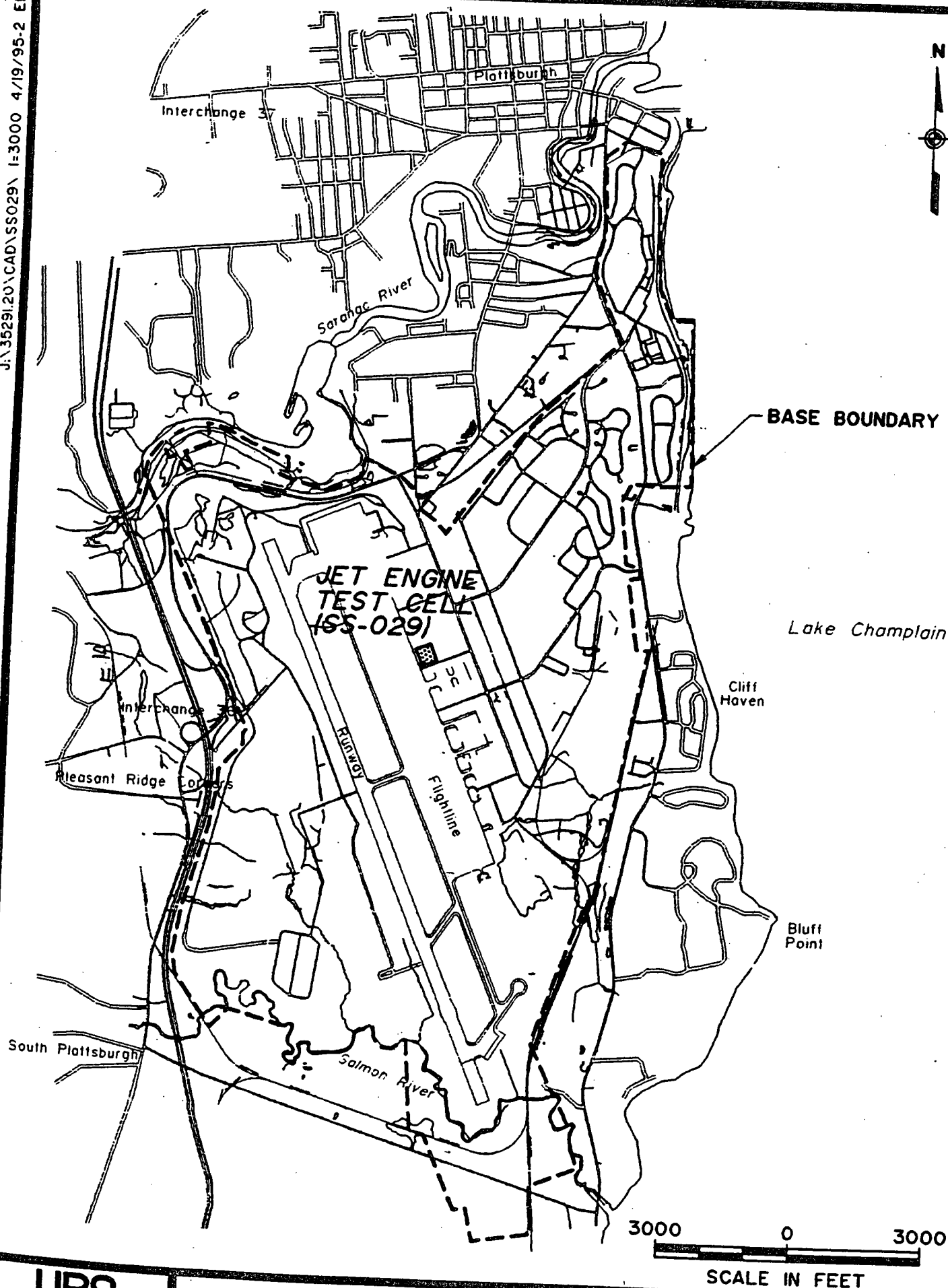
This Decision Document (DD) represents the selected action for this site developed in accordance with CERCLA, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the National Contingency Plan (NCP). It also satisfies the requirements of the National Environmental Policy Act (NEPA) that apply to CERCLA response actions. It has been determined that the selected remedy of no further action is protective of human health and the environment, attains Federal and State requirements that are applicable or relevant and appropriate, and is cost effective. The statutory preference for further treatment is not satisfied because further treatment was found not to be necessary. Contaminant levels at the site have been determined to present no significant threat to human health or the environment; thus, no treatment is necessary.



Michael D. Sorel, PE
Site Manager/BRAC Environmental Coordinator
AFBCA/DA Plattsburgh

9-14-00
Date

Attachment 1



Attachment 2



FIGURE 1-3

Attachment 3



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

JUL 10 1997

Mr. Michael D. Sorel, P.E.
BRAC Environmental Coordinator
AFBCA/DA
426 U.S. Oval, Suite 2200
Plattsburgh, New York 12903

Re: Draft Final Site Investigation Report, Jet Engine Test Cell
(Site SS-029)

Dear Mr. Sorel:

The Environmental Protection Agency (EPA) has completed review of the draft final Site Investigation (SI) Report for the Jet Engine Test Cell (IRP Site SS-029) at Plattsburgh Air Force Base. EPA concurs with the Report's conclusion that no remedial action is warranted to reduce or contain site contaminants. Please note, however, that based on data contained in the SI, property at the Site should not be considered "uncontaminated" for the purposes of property transfer.

If you have any questions regarding this letter, please feel free to call me at (212) 637-4331.

Sincerely,

A handwritten signature in cursive script that reads "Robert D. Morse".

Robert D. Morse
Remedial Project Manager

cc: J. Lister, NYSDEC
M. Barie, PARC
N. Sears, PARC

RECEIVED

JUL 15 1997

AFBCA/DA PBF

A handwritten signature in cursive script, possibly reading "KIC".

973

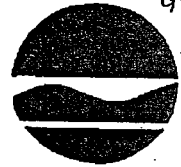
1

File:
Y.L. 1813-29

973

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

February 11, 1997



John P. Cahill
Acting Commissioner

Mr. Michael Sorel, P.E.
AFBCA/DAE
426 U.S. Oval Suite 2210
Plattsburgh Air Force Base, NY 12903

Dear Mr. Sorel:

Re: Draft Final SI Report SS-029, Jet Engine Test Cell
Plattsburgh Air Force Base, 510003

New York State has received and reviewed the draft final Site Investigation Report for SS-029, Jet Engine Test Cell at Plattsburgh Air Force Base. Our review affords us with the position of having no comments on this document.

If you have any questions, please feel free to contact me at 518-457-3976.

Sincerely,

James B. Lister, P.E.
Bureau of Eastern Remedial Action
Division of Environmental Remediation

cc: R. Morse, USEPA-Region II

RECEIVED

FEB 14 1997

AFBCA/DA PBG

BEC
BRADY

File yf 18-C-01-01-02
18-B-29



885 1
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

File: 18B29
Y.L. 885

Hand Carried

SEP 18 1996

Mr. Michael D. Sorel, P.E.
BRAC Environmental Coordinator
AFBCA/DAE
426 US Oval, Suite 2210
Plattsburgh, New York 12903

Re: Review of the Draft Site Investigation Report for the Jet
Engine Test Cell (Site SS-029)

Dear Mr. Sorel:

EPA has completed review of the Draft Site Investigation (SI)
Report for the Jet Engine Test Cell (Site SS-029). EPA comments on
the document are attached to this letter.

The majority of comments enclosed involve requests for
clarification of statements, providing additional detail, or for
correcting erroneous text or data. In general, the risk assessment
was performed in accordance with current USEPA guidance. The
calculations were spot-checked and appear to be correct. However,
corrections to and clarification of the text are needed. The
recommendation for no further action at the site appears
appropriate.

If you have any questions regarding these comments, please feel
free to call me at (212) 637-4331.

Sincerely,

A handwritten signature in cursive script, likely belonging to Robert D. Morse.

Robert D. Morse
Remedial Project Manager

Enclosure

cc: J. Lister, NYSDEC

Rec'd 20 Sep

REC
Brady

EPA COMMENTS ON THE DRAFT SITE INVESTIGATION REPORT FOR THE JET
ENGINE TEST CELL (SITE SS-029)

GENERAL COMMENT

Soil analytical data are compared to site background surface soil concentrations determined in the Background Surface Soil & Groundwater Survey for the Plattsburgh Air Force Base, Draft Report (URS, April 1995). Comparison of site specific background data to analytical results for soil samples collected from the subsurface (greater than 2 feet below grade) should be made with caution, since the background soils survey was limited to surficial sampling.

PAGE SPECIFIC COMMENTS

Page E-1, Paragraph 6: The text specifies that four metals were detected in soil samples, but at concentrations below regulatory limits. However, site background concentrations are To Be Considered (TBC) criteria for metals in soil.

Page E-1, Paragraph 6: The text specifies that four metals were detected in soil samples, but makes no mention of selenium, for which all soil data points were rejected. The reader should not be left with the impression that selenium analytical data were usable and that this metal was not detected in all site samples.

Page 1-1, Section 1.2, Paragraph 2: Is the waste oil tank which receives the discharge from the oil/water separator located in the same partially-buried housing as the oil/water separator? If not, please locate the oil tank on Figure 1-3, and indicate whether it is an underground storage tank (UST) or an aboveground storage tank (AST).

Page 1-1, Section 1.2, Paragraph 3: Was the previous oil/water separator, installed in 1971, located in the same place as the current oil/water separator? If not, please locate the former oil/water separator on Figure 1-3. A soil sample should be collected from the location of the former oil/water separator if it was in a location not in proximity to the location of the current oil/water separator.

Page 1-4, Figure 1-3: The boundaries of site SS-029 should be marked on the figure. Based on the figure and additional information presented in Section 1, it is not clear where the limits of the site lie.

Page 1-4, Figure 1-3: Several miscellaneous artifacts (i.e., 36"

and 12" manholes north of tank 2820-1, 4' cap in concrete adjacent to the southeast corner of Building 2820, etc) are depicted on the figure. Has the history and physical features of such artifacts been investigated in order to determine whether they could indicate the presence of potential source areas?

Page 1-9, Table 1-1: The table states that tank UST-2820-2 was located north of Building 2820, across the road. Figure 1-3 indicates that this tank was located on the same side of the road as Building 2820. Please resolve this discrepancy.

Page 2-3, Section 2.3, Paragraph 1: The text states that MW-29-001 and MW-01-047 were sampled on 15 November 1994, however, Appendices A, B, C, and F indicate that the upgradient monitoring well was sampled on 16 November 1994 and is labeled MW-02-047. Please resolve this discrepancy.

Page 3-9, Section 3.5, Paragraphs 4 and 6: The text indicates that the stratigraphic information presented for the confining unit and deeper (bedrock) aquifer underlying SS-029 are inferred from deep borings conducted for other investigations (i.e., PZ-2D and PZ-11D). It is recommended that the report present a figure which locates the borings utilized to construct the cross-section for clarity. The deeper borings' proximity to SS-029 was not made clear to the reader. Modifying Figure 3-6 to include the locations of PZ-2D and PZ-11D would be appropriate.

Page 3-11, Figure 3-7: The identifier assigned to the monitoring well located on the extreme right of the cross-section is in error. The well should be identified as MW-06-002, not as MW-29-002.

Page 3-11, Figure 3-7: Since none of the borings/wells included on the geologic cross section were advanced to either the clay/till unit or the bedrock (with the exception of MW-06-002 to the clay/till unit), the figure should include a note describing how the elevations of the tops of these geologic units were determined.

Page 3-13, Section 3.6, Paragraph 2: Please provide a rationale for presenting the groundwater level/flow direction for 11 December 1994 in preference to the data for 12 January 1995 (the other date for which groundwater level data are available for the four wells included in the calculation). At a minimum, please indicate whether data collected on 12 January 1995 indicate similar groundwater flow direction and horizontal hydraulic gradient as those identified using the December 1994 data.

Page 3-13, Section 3.6, Paragraph 3; and Table 3-3, Page 3-17: Based on the data presented in Appendix H, the hydraulic conductivities were miscalculated. See comment for Appendix H.

Section 3.6, Figure 3-8: Please indicate which contouring package was used to determine groundwater elevation contours. Manual

krigging resulted in a slightly different flow pattern.

Page 4-1, Section 4.1, Paragraph 8: The text states that action specific ARARs are generally addressed in a Feasibility Study. EPA's Guidance Document for Conducting Remedial Investigations and Feasibility Studies under CERCLA (USEPA, October 1988) suggests that ARARs be discussed in the Remedial Investigation Report.

Page 4-8, Table 4-1: Site background soils data should be used with caution for comparison to subsurface soil analytical data since base-specific background criteria were only determined for surface soils.

Page 5-7, Section 5.3, Paragraph 1: Were comparisons of retention times made between the semivolatile TICs observed in the method and rinse blanks associated with the environmental samples? If the TICs detected in the soil and groundwater samples were indicative of laboratory and/or sampling equipment contamination, there should be some correlation between the retention times (and hence molecular weights) of the TICs detected in the environmental and quality assurance samples.

Page 6-2, Section 6.2: It would be helpful to indicate whether a full or partial chemical analysis was performed for each medium (e.g., not all metals were analyzed in groundwater).

Page 6-2, Section 6.2.2, sentence 2: The wording is confusing to the reader. The sentence suggests that the detected concentrations for each chemical were compared with both the maximum blank concentrations of the common laboratory contaminants and the maximum blank concentrations of other analytes. Please clarify.

Page 6-3, Section 6.3.1: Additional information should be included regarding the soil and groundwater samples. The depths of the samples considered to be surface and subsurface samples, and the number of groundwater sampling rounds should be indicated. A figure showing the sampling locations, or a reference to a figure showing the sampling locations should be provided.

Page 6-3, Section 6.2.5, Paragraph 1: The discussion seems limited to TICs detected in soil samples. The text should be revised to include a discussion on the evaluation of TICs detected in the groundwater samples.

Page 6-4, Section 6.3.2, paragraph 1, last sentence: It is unusual for all metals to be above background. This may be due to a high concentration of suspended particulates in the sample(s). If this is the case, it would be appropriate to include a comment to that effect in the text.

Page 6-11, Figure 6-3: The box showing adult and child residents as receptors should be changed to indicate an industrial worker.

A residential scenario was not evaluated.

Page 6-12, Section 6.4.2.2, paragraph 2: An explanation should be provided as to why the fugitive dust (wind erosion) pathway was not evaluated for the future industrial worker. The wind erosion pathway needs to be added for the industrial worker in Figure 6-3.

Page 6-12, Section 6.4.3, paragraph 2, sentence 4: Please check the USEPA 1992a reference. A previous URS risk assessment indicated a different USEPA 1992a reference (i.e., Calculating the Concentration Term) as the source of the formulas. The previously cited reference appears to be correct.

Page 6-14, Section 6.4.3, paragraph 2, last sentence: Delete the phrase "For chemicals that were detected infrequently..." One-half the SQL should have been used for nondetects regardless of the frequency of detection.

Page 6-14, Section 6.4.4: This subsection should be rewritten to discuss and distinguish between the two types of exposure doses calculated in the exposure assessment: administered doses, which are calculated for the ingestion and inhalation exposure routes, and absorbed doses, which are calculated for the dermal exposure route. Paragraph 1, sentence 1 applies only to administered doses.

Page 6-14, Section 6.4.4, paragraph 1, sentence 4: Delete the phrase "the relative absorption factor of the chemical." Relative absorption factors were not used to calculate doses.

Page 6-18, Table 6-7: Please define "CSD" or delete the column. The inclusion of the CSD values seems to be unnecessary. The equation given below the table includes only CA, CS, and MEF.

Page 6-19, Table 6-8 and page 6-20, Table 6-9, footnote (a): The reference for the absorption factors is USEPA 1992b. Because neither cadmium nor PCBs were chemicals of potential concern, it would be more appropriate if the footnote were rewritten to indicate that absorption factors were not available for any of the CPCs.

Page 6-20, Table 6-9: It should be indicated in the table or in the text that the inhalation rate for the worker is based on heavy activity.

Page 6-21, Section 6.4.4, Frequency and Duration of Exposure to Soil: Some explanation should be given as to how the exposure frequency and duration for the trespassers were arrived at; are they reasonable based on the site size, location, suitability for recreation, etc? Since most adults are at work 5 days/week for most of their adult lives, and teenagers should be at school for most of the day during most of the year, the assumptions may be overly conservative.

Page 6-21, Ingestion of Soil: The bases for the soil ingestion rates assumed for the trespassers need to be explained. Table 6-8 indicates that they are EPA default exposure assumptions; however, there are no EPA-recommended soil ingestion rates for a trespasser scenario.

Page 6-21, Skin Surface Area: It is illogical to use a larger body surface area for the teenage trespasser than for the adult trespasser, if the same parts of the body are assumed to be exposed. A single value should be selected and used for both.

Page 6-21, Subsection 6.5, paragraph 2, sentences 2 and 3: The references for IRIS and HEAST should be USEPA 1994 and 1995 (not 1994a and 1995a), respectively. The references also should be corrected in the reference section (page R-3).

Page 6-22, (Subsection 6.5), equations: These are not equations for converting RfCs to RfDs; they are equations for interconverting cancer unit risk factors with inhalation and oral cancer slope factors. These equations should be used in the correct context, if they are applicable to the risk assessment; otherwise, the equations should be deleted. Also, if applicable, the correct equation for calculating an inhalation RfD from an RfC should be added to the text, and the calculation of RfDs from RfCs should be checked, using the correct equation. The sentence following the equations is incorrect and should be deleted; there are no carcinogenic RfCs.

Page 6-22, Section 6.5, paragraph following the equations, sentence 2: Insert the word "dermal" after "Because."

Page 6-23, Table 6-10: a) The weight-of-evidence for each of the PAHs should be included in the table. b) It would be helpful if a footnote were provided indicating that a toxicity equivalency factor approach based on toxicity relative to benzo(a)pyrene was used to evaluate the cancer risk posed by the other carcinogenic PAHs. c) Genotoxicity, listed as the tumor site for benzo(a)pyrene, is not a tumor site. The correct tumor site(s) should be indicated.

Page 6-24, Section 6.5.1, item a, last sentence: This statement is not applicable and should be deleted.

Page 6-24, Subsection 6.5.2, paragraph 1, sentence 1: The phrase "Unlike carcinogens, noncarcinogenic compounds..." should be changed to "Unlike carcinogenic effects, noncarcinogenic effects..."

Page 6-24, Section 6.5.2, paragraph 2, sentence 1: Change the phrase "...summarizes toxicity information for the noncarcinogenic chemicals..." to "...summarizes noncarcinogenic toxicity information for the chemicals..."

Page 6-24, Section 6.5.2, item a., sentence 1 (definition): Delete the phrase "... for noncarcinogenic chemicals..."

Page 6-24, Section 6.5.2, item a., last sentence: This sentence is not applicable and should be deleted.

Page 6-26, Section 6.5.2, item b: The wording should be changed to read "...expressing the most sensitive end point of adverse response (e.g., liver damage) associated with exposure to the chemical."

Page 6-26, Section 6.5.3, paragraph 1, last sentence: The phrase "...13 of the 20 detected noncarcinogenic chemicals..." should be changed to "...12 of the 19 CPCs..." Some of the chemicals referred to are carcinogens. Of the CPCs, chromium should be counted only once.

Page 6-27, Section 6.6.2, next to last paragraph, sentence 1: The sentence should be changed to read "Different chemicals may have different adverse noncarcinogenic responses or end points."

Page 6-27, Section 6.6.2, next to last paragraph, sentence 2: Delete the word "noncarcinogenic."

Page 6-27, Section 6.6.2, last paragraph, sentence 2: Change the phrase "25 to 30 years" to "25 or 30 years." To be consistent, the sentence also should indicate that the 25 or 30 years refer to industrial workers and adult trespassers.

Page 6-27, Section 6.7, definition of "Noncarcinogenic effects," sentence 2: Change the phrase "If noncarcinogenic risk..." to "If the hazard index..."

Page 6-29, Section 6.7, paragraph 1, sentence 2: Change "The calculated risk..." to "The calculated hazard index..."

Page 6-29, Section 6.7, paragraph 3, sentence 1: Delete "risk."

Page 6-29, Section 6.7, paragraph 3, sentence 2: Change "...to this risk" to "...to the hazard index..."

Page 6-30, Table 6-13, item 5: This item is not applicable and should be deleted. The dermal exposure route was not evaluated quantitatively. Therefore, dermal absorption factors did not affect any risk calculations.

Page 6-30, Table 6-13, item 6, Potential Source and Reason for Uncertainty: Change the word "most" to "any."

Page 6-32, item 2: According to the Draft New York State Air Guide-1 (Appendix K), the air model calculates concentrations within the source area. It is unclear why it is stated that the

model doesn't calculate concentrations less than 200 meters from the source. Please clarify.

Page 6-33, bullet 3: Suggest changing "is five times less" to "is one-fifth."

Page 6-33, bullet 4: Suggest changing "is ten times less" to "is one-tenth."

Appendix C: TICs should be presented on the validation summary tables.

Appendix C: Table C-1 indicates that all selenium data were rejected, as well as the chromium data for samples WP-MW-29-001-0 and WP-MW-29-001-4. A discussion regarding the reasons for the data rejection should be provided in the report. This discussion should include why the data points were invalidated, what field or laboratory conditions (if any) could have caused the problems, and what corrective actions will be implemented to prevent similar occurrences from occurring throughout the remainder of the field program being conducted at Plattsburgh Air Force Base. Based on the groundwater data for this well, however, resampling the soils for the rejected analytes does not appear warranted.

Appendix C: Associated method blank samples are not provided for the metals analysis. CLP Method ILM03.0 provides for method blank analysis as part of the Quality Assurance (QA) process. The associated method blanks should be provided in Tables C-1 and C-2.

Appendix D: The soil description presented in Table B-1 (Appendix B) for the soil sample collected from 0.0 - 2.0 feet from boring SB-29-02 does not agree with the material description presented on the test boring log in Appendix D. Please review both for accuracy.

Appendix E: The well construction data seems to be in error. The well construction log indicates that the well screen and riser are 10 feet in length each, that the well is set at 15.5 feet below grade, and that the well is finished at the ground surface with a flush-mount road box. Based on the arithmetic, the reported dimensions for the screen length, casing length, the depth of well, or any combination thereof, are incorrect. The authors should review the construction log for accuracy.

Appendix H: The water level and well construction data indicate that the well screen and sand pack were fully submerged during the entirety of the rising and falling head slug tests. As a result, sandpack dewatering should not have to be taken into account during calculation of the hydraulic conductivities. The input data presented in Appendix H indicates that sandpack dewatering was factored into the Bouwer and Rice method calculations, which would provide faulty hydraulic conductivity values. Please rerun the

program with the correct input values.

Appendix I: Subsurface Boring Location Sheets were not provided for WB-MW-29-001 and WB-MW-02-047.

Appendix J, Tables J-5, J-7, J-9, J-11, J-13, and J-15: The word "noncarcinogenic" should be deleted from the title of each of the tables. The tables include both carcinogenic and noncarcinogenic chemicals.

Appendix L, Toxicity Profiles: In general, the information presented in the toxicity profiles could be better organized and written. The information, as presented, is likely to be confusing to the average reader.

To eliminate repetition of text, rather than present a toxicity profile for each of the PAHs, it might be preferable to present one detailed toxicity profile for all PAHs. The PAH profile could include a discussion of the relative carcinogenic potencies of the individual PAHs.

Appendix L, page L-1, Acetone, paragraph 1, sentence 5: The sentence should clarify what it is that acetone is not readily adsorbed to.

Appendix L, Page L-1, Acetone: Contradictory information is presented in paragraphs 2 and 3 regarding gastrointestinal effects. In paragraph 2, sentence 3, it is stated that "GI effects have not been reported." In paragraph 3, sentence 2, "GI disturbances" are listed as an effect.

Appendix L, page L-1, Arsenic, paragraph 2, sentence 1: The sentence should be rewritten to read "This substance has been listed as a carcinogen." In sentence 2, the phrase "is listed in Group A" should be changed to "is listed as Group A."

Appendix L, page L-2, Benzo(a)pyrene, paragraph 2, sentence 2: Insert the phrase "in animals" after the phrase "key endpoint of toxicity."

Appendix L, page L-5, Diethylphthalate: The toxicity information should be clarified to indicate which toxic effects were observed in animal studies, and which were observed in humans.

Sentence 4: Please clarify what is meant by a "systemic irritant."

Sentence 5: The sentence should probably read "Diethylphthalate causes narcosis at high concentrations."

Appendix L, page L-6, (Fluoranthene), paragraph 2, sentence 3: Change "gauged" to "gavaged."

885 10.

Appendix L, page L-6, Methylene Chloride, paragraph 2, last sentence: Change "toxicity" to "carcinogenicity."

File yf 18-C-02-01-02
18-13-29

728 1

File:
Y.L. 1813-29



728

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 Wolf Road, Albany, New York 12233

August 30, 1995

Michael D. Zagata
Commissioner

Mr. Michael D. Sorel, P.E.
380 ST/CEV
324 U.S. Oval Street
Plattsburgh AFB, NY 12903-3316

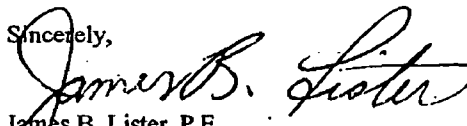
Re: Draft Site Investigation
SS-029, Jet Engine Test Cell
Plattsburgh Air Force Base ID No. 510003

Dear Mr. Sorel:

New York State has received and reviewed the draft site investigation report for SS-029, Jet Engine Test Cell at Plattsburgh Air Force Base. We have no comments to offer at this time.

If you have any questions please feel free to call me at (518) 457-3976.

Sincerely,


James B. Lister, P.E.
Bureau of Eastern Remedial Action
Division of Hazardous Waste Remediation

cc: R. Morse, USEPA-Region II

DEC-11
BEC-11